

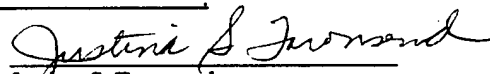
**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Tracy E. Grim, et al.	Examiner:	Marie Patterson
Serial No.	09/592,462	Group Art Unit:	3728
Filed:	June 9, 2000	Docket No.	480032-307
Title:	FOOTGEAR WITH PRESSURE RELIEF ZONES		

**CERTIFICATE UNDER 37 CFR 1.8**

I hereby certify that this correspondence and identified enclosures are being deposited with the United States Postal Service, first class mail, postage prepaid, under 37 C.F.R. 1.8 on the date indicated, and is addressed to the Commissioner for Patents, BOX: Non-Fee Amendment, Washington, D.C. 20231 on 4/30/02

  
Justina S. Townsend

BOX: Non-Fee Amendment  
Commissioner for Patents  
Washington, D.C. 20231

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**MAY 23 2002**  
TECHNOLOGY CENTER R3700

**SECOND SUPPLEMENTAL DECLARATION**  
**OF TRACY E. GRIM**

I, TRACY E. GRIM, hereby declare as follows:

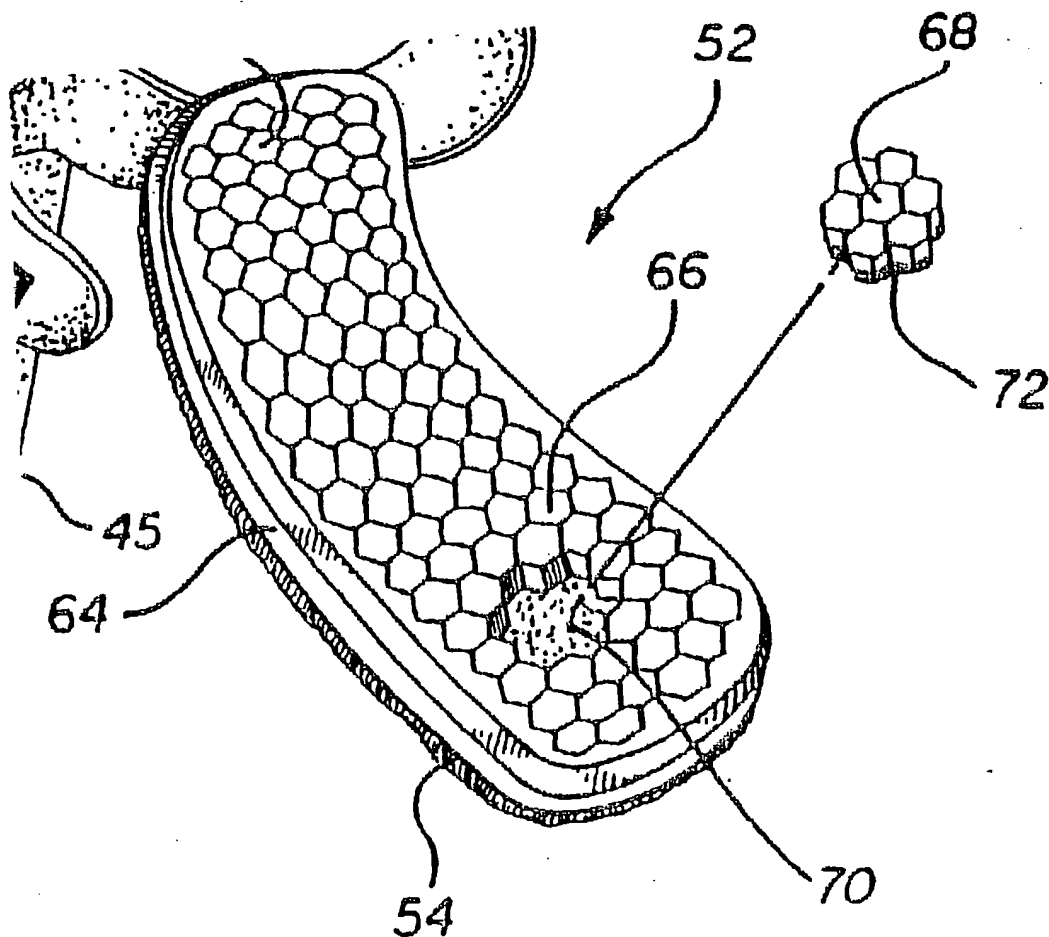
1. I hereby reaffirm the statements set forth in my prior Declarations in this case, dated September 10, 2001 and December 4, 2001.

2. I have reviewed the Office Action mailed February 4, 2002 and have also reviewed the references relied upon in that Office Action.

3. An important feature of the present invention involves the construction by which the shear forces on the sole of the foot are significantly reduced. This is discussed in the first full paragraph in Column 13 of issued U.S. Patent No. 5,761,834, as follows:

It should be noted that the various embodiments of the present invention provide means to reduce shear forces on the sole of the foot. The grid pattern of resilient sections creates a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot. Typical soles simply resist lateral foot motion, thereby inducing shear stresses on the bottom of the foot which may cause or aggravate ulcers. Thus, in contrast to typical soles, the grid pattern of independently mobile resilient sections of the present invention constitutes means for reducing shear stresses on the bottom of a foot as the user walks along.

4. With regard to the implementing construction, the following enlarged portion of Fig. 2 of the drawings is of interest.



5. In the foregoing drawing note that a group of seven sections has been removed, and that with the hexagonal shape and relatively small members of sections, the relieved area on the sole is substantially circular, and has no very sharp corners. In addition, note that the remaining sections are not flat as shown in both the Kellerman and Andrews patents, but have significant vertical extent so that swaying of the upper portions of the sections occurs as a result of shear forces on the sole of the shoe. Thus, instead of sliding over the surface as disclosed in Kellerman, or the immovable restraint around a relieved area as disclosed by Andrews, the sections remain in engagement with the foot, but dissipate the shear forces by the swaying or freely bending action of the sections.

6. With regard to the Kellerman construction, it includes a thin smooth layer of UHMV polyethylene; and he teaches that the foot is to slide on this surface. Specifically, note the paragraph of Kellerman starting in column 2, line 25 wherein Kellerman states that his shoe insert has "an extremely low coefficient of friction". Kellerman is concerned with callouses, corns, bunions or heel spurs where this type of sliding may be useful. However, with ulcer healing being a very delicate process as described in my prior Supplemental Declaration, the sliding action of Kellerman would irritate the ulcer and prevent healing.

7. In the Office Action the construction of the Andrews patent is mentioned, and the Office Action states that Andrews would suggest re-orienting the Kellerman pad, or turning it upside down. Now, what does Andrews actually disclose? An insole with depressions and removable inserts in these fixed location depressions or recesses. Accordingly, the logical modification of Kellerman according to Andrews would be to make the insole of Kellerman substantially solid with downwardly directed recesses into which the Kellerman removable pads could extend.

8. Regarding the Andrews patent, note that it only suggests selecting the number and position of depressions, and never suggests switching over to an array of inserts without depressions for receiving inserts.

9. Further, even if Kellerman could have been turned upside down as suggested in the Office Action, it would still not have the vertical extent required to provide the swaying

action or transverse mobility which provides the reduction or elimination of the adverse effects of shear.

10. In addition, with the Kellerman emphasis on sliding action, any modification of Kellerman would be expected to provide such sliding action on the surface toward the foot, and this would clearly prevent ulcer healing, which is one important aspect of the present invention.

11. Further, in the event of a combination of Andrews and Kellerman, (and there are no teachings for such a combination) such a combination might include an array of depressions with fixed enclosing walls, with many removable inserts; and such a construction would entirely fail to accommodate shear forces, and would prevent ulcer healing.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent application issuing thereon.

Respectfully submitted,

Date: \_\_\_\_\_

\_\_\_\_\_  
Tracy E. Grim

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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*Justina S. Townsend*  
Justina S. Townsend

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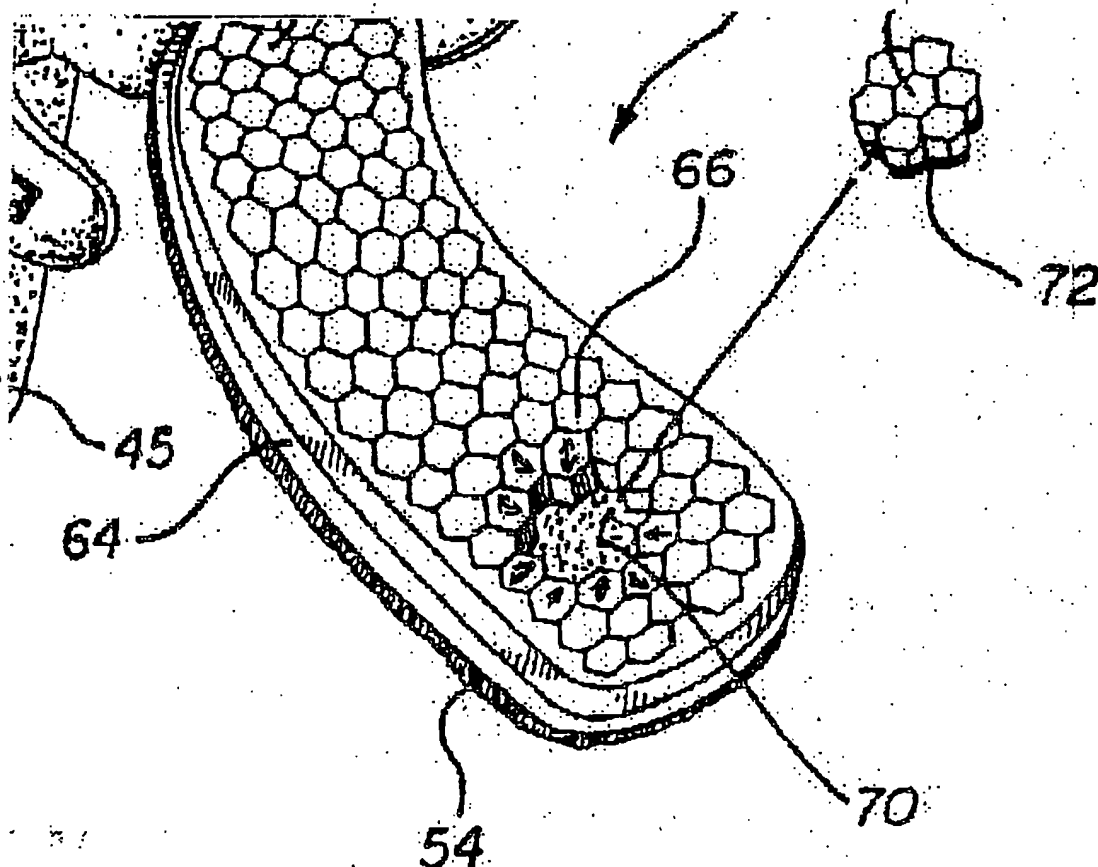
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Serial No. 09/592,462

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Respectfully submitted,

Date:

April 15 '02  
Tracy E. Grim